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Cover Page Footnote

The authors would like to thank Larry Bowser and Holly Taylor for enthusiastically facilitating the excavation of their property, the Green Mansion Site. Thanks also to the students of the University of Massachusetts field school who provided most of the data for this research. Laura Genberg deserves special thanks for her continued assistance in every phase of the project. Particular thanks also to Windsor residents Emma Carroll and Katherine E. Conlin for their invaluable historic information on the Green family.

CERAMICS AND SOCIO-ECONOMIC STATUS OF THE GREEN FAMILY, WINDSOR, VERMONT

Suzanne M. Spencer-Wood and
Scott D. Heberling

INTRODUCTION

Within the context of reconstructing past lifeways (Binford 1968:12), this research investigates the possibility of distinguishing patterns of early nineteenth century social stratification among eleven United States sites on the basis of differences in the relative mean value of ceramic whiteware decorative types found at those archaeological sites. Relationships were also considered between ceramic decorative types and utilitarian foodways, market access and ethnicity.

Ceramic attributes have many functions that can be classified according to Binford's (1962) three categories of technomic, socio-technomic and ideotechnomic. Technomically, ceramics carry information about manufacturing techniques within the ceramic industry. Ceramic marks and patterns that can be traced to manufacturers permit delineation of the ceramic distribution system resulting in site location differences in availability of goods. In their forms, ceramics yield information about their uses in food processing, preparation, consumption and other aspects of foodways behavior. Within the basic limits of use, the same ceramic form could have different foodways functions in households with different ethnic food processing, preparation or consumption patterns. Within a given ceramic form, decorative types, through price and fashion distinctions, convey information about social stratification. Some decorative types could only be afforded by the very wealthy, while more moderately priced ceramics could be acquired by all but the poorest in the working class and the unemployed. If some households did not use ceramics for status display, there may be a lack of corre-

spondence or fit between a household's ceramic decorative types and its socio-economic status. For example, although the English teaware imported to the United States carried status display information (Miller 1984:47), not all Americans, such as some non-English ethnic groups, would display status through the decorative type and price of their teaware. Some particular ceramic decorations or forms may also convey ideology, possibly through the content of some scenes depicted in transfer prints, for example. These alternative meanings of ceramics were considered, and the analysis of ceramic decorative types was chosen to relate to socio-economic status.

The social stratification differences among eleven nineteenth century sites were assessed by forming a status scale of the sites ranked according to the relative mean values of their ceramic assemblages and comparing this scale with relative site ranking according to residents' occupations. Nineteenth century household ceramics are assumed to have been largely acquired from those available in the market economy, although some may also have been acquired as gifts or heirlooms, or acquired through some form of secondary recycling. Consumer selections of ceramics purchased from the range available in the market economy are among the major cultural formation processes responsible for the archaeological record (Schiffer 1977). Ceramics are used in households for food processing, preparation and eating, for status display, and possibly sometimes as ideological statements. Some of the ceramics used by a household may be lost or discarded in the yard around the house, while some ceramics may be deposited elsewhere by a household. Some ceramics may remain in the cultural system of the household for long periods or be passed to other locations in the cultural system through recycling mechanisms, such as inheritance within an extended family, gift giving, barter or resale. Schiffer has considered in detail cultural formation processes affecting the relationships between the archaeological record and material culture in

the cultural system (1977). In the nineteenth century the market economy, through the mechanism of ceramic prices, was a major cultural subsystem affecting household acquisition of ceramics, as well as the frequency of use and selective discard of ceramics.

The archaeologically recovered ceramics discarded or lost by a household on their site represent a partial sample of the ceramics used by the household. Selective household discard patterns and unavoidable biases due to whatever archaeological methods were used (since total recovery is never possible), result in partial and biased archaeological samples of ceramics. It may be possible to assess the representativeness of archaeological ceramic samples by contrasting them to strictly comparable documentary data, such as extremely detailed probate inventories recording the non-discarded portion of a household's ceramics partially represented by the recovery of an archaeologically biased sample. Since the documentary record is not necessarily less biased than the archaeological record, the different biases in each type of data may be determined to some extent by contrasting comparably detailed partial documentary and archaeological data on the same household ceramics to assess the degree of correspondence or fit between them. More complete documentary data for some ceramic types may indicate lack of discard of these types in the archaeological record, while more complete archaeological data for other ceramic types may indicate less documentation and/or more discard of these types. For the primary research site of the Green house, the archaeological ceramic assemblage was compared and contrasted with an unusually detailed probate inventory, both representing ceramics from the same household and time period. The pattern of correspondence or fit between these two comparable sources of data indicated some different possibly systemic types of bias in probate inventories as contrasted to archaeological ceramic assemblages.

Establishing the relationship between ceramic decorative types in archaeological as-

semblages and socio-economic status was the primary research objective. Ceramic decorative types were analyzed because they are related to price and therefore to socio-economic status (Miller 1980:10-11), considered as the combination of the ability of afford certain decorative types, and the social status symbolized by the decorative types owned by a household. At the same time, the possibility was considered that ceramics could be acquired by a household simply for their utilitarian foodways functions and not for their indications of status. It was hypothesized that ceramic forms with primarily utilitarian functions would not be of expensive decorative types. Those ceramic forms that served primarily to display status were expected to include the household's most expensive ceramic decorative types. However, the possible relationships of ceramic assemblages to utilitarian foodways functions, to market access and to ethnicity, and the effects of selective discard on the archaeological ceramic assemblage were also considered. Other aspects of cultural behavior that may affect ceramic assemblages, such as religious or political affiliation, education and personal preference could not be considered because they were unknown for the sites analyzed.

Archaeological samples of ceramics recovered on historic sites are the results predominantly of consumer choices of goods available in the market economy, and loss and selective discard patterns of the past inhabitants of those sites. Consumer selections of decorative types within a given ceramic form are influenced by an indeterminate number of interrelated factors, including site location and the availability of goods, occupation, ethnicity, economic level, social status, family size, religious and political affiliation, as well as individual preferences. The complex interaction of these and other factors affecting consumer decisions makes it difficult to understand fully the role of each variable. The problem is central to historical archaeology, since a major goal of the discipline is to reconstruct the lifeways of past societies on the basis of the material

artifacts which they left behind, and to use this information to make general statements about cultural processes (Binford 1968). Consumer decisions are among the cultural formation processes responsible for the archaeological record (Schiffer 1977). Until more is known about the many factors that influence consumer behavior and determine the kinds of artifacts excavated, sophisticated archaeological interpretation is difficult.

Major factors affecting consumer choices of goods later deposited at archaeological sites include ethnicity, market access and socio-economic status. Several studies have focused on the effect of ethnicity on ceramic and faunal consumption patterns indicated by archaeological data (Otto, 1984, 1977; Baker 1980; Greenwood, 1980; Langenwaller 1980). Others have been concerned with the effect of site location on market access and the availability of goods (Adams 1976; Riordan 1981; Schuyler 1980; Spencer-Wood 1979; Miller and Hurry 1983). However, a growing number of archaeologists have focused on the closely related variables of income, occupation, and social status and their effects on archaeologically indicated patterns of consumer behavior (Spencer-Wood 1984; De Cunzo 1982; Felton and Schulz 1983; Dyson 1982; McBride and McBride 1983). The primary hypothesis of this research is that the mean ceramic price index value of archaeological assemblages of whiteware decorative types are most strongly affected by socio-economic status, despite other variables that could not be held constant.

The terms "status" and "class" are ambiguous and can be defined in many ways. Status is defined here as "the location of the behavior of individuals or the social positions of individuals themselves in the structure of any group. It is a defined social position located in a defined social universe" (Warner, et. al. 1949:253). Although the two concepts are not synonymous, there is a high degree of correlation between an individual's economic position and his ranked status within the society (Warner, et. al.

1949:39). Some archaeologists and other anthropologists have related social status to economic division of labor (Clark 1970; Kaplan and Manners 1972; 94-101). Studies in the United States found that status is best indicated by occupational category, followed by quality of house and residential area, in a factor analysis of 19 status related variables (Kahl and Davis 1955). If an individual's economic position can be determined, it usually is possible to predict his social status because occupation forms the basis of income, social interaction, leisure time, shared knowledge and values of a social group (Barth and Watson 1967:394). Historians (Hershberg and Dockhorn 1976:60-68; Katz 1972:85,87), economists (Martineau 1958; Engel, Blackwell and Kollat 1978:116) and sociologists (Reissman 1959:144; Hodges 1964:95) have considered occupation to be the most objective indicator of socio-economic status, supporting this use by archaeologists.

A number of historical archaeologists have related archaeological ceramic assemblages to occupational status (De Cunzo 1982; Felton and Schulz 1983; McBride and McBride, 1983; Morenon et al, 1982; Raffa 1983; Spencer-Wood 1984; Heberling 1985; Otto 1984). At some sites ceramics have been analyzed in order to infer the status of site inhabitants whose occupations were poorly documented (Geismar 1982; Dyson 1982). A major objective of this study is to determine the possibility of using Miller's ceramic index to indicate status when insufficient documentation exists, by establishing a scale relating the relative value of ceramic assemblages and occupations documented for eleven early nineteenth century sites.

Several studies have established strong relationships among occupation, income, wealth and amount of consumer expenditure for durable goods and ceramics in both the twentieth and nineteenth centuries. Some economic anthropologists (cf Douglas and Isherwood 1979; 25, 116-119) consider wealth, usually determined by occupation, as a major factor in consumer selections of

goods. Keynesian economic models, supported by twentieth century data, espouse a directly proportional relationship between income and amount of consumer spending versus saving (Dusenberry 1971; Heilbroner 1970:230). Recent research has established high correlations between occupation, income and consumer choices (Myers and Mount 1973:71-3). In Massachusetts during the 1870's an "intimate" relationship was found between occupational income and degree of expenditure on necessities versus luxuries (Massachusetts Bureau of Statistics of Labor 1875: 355). In the Boston area, correspondences were found between average probate inventory values of durable goods and total personal estate by occupational category in Quincy during the 1870's (Spencer-Wood 1981), and between average value for personal estates and total estates for six occupational categories in Quincy 1870-1900 (Spencer-Wood 1984). Similar research on probate inventories from the 1840's in St. Mary's County, Maryland, established that although ceramics formed only a small percentage of total expenditures, the amount did increase proportionately with the value of moveable goods, until this reached \$1500. After this "saturation point," called decreasing marginal utility by economists (Peterson 1977), for moveable goods, ceramic values leveled off and no longer increased in proportion to increasing total inventory values (Herman, Sands and Schector 1973:59-63). These studies indicate strong relationships among occupation, income, wealth and consumer choices of durable goods, including ceramics.

The above research suggests that other variables do not usually affect consumer choices as strongly as socio-economic status. These studies support the use of ceramics from archaeological sites to indicate status. The importance of ceramics is due to their abundance on historic sites, their durability, and their role as status-indicators (Stone 1970:126; Miller and Stone 1970:100; Deetz 1977:46; Miller 1980:10-11, 1984:47). The research discussed above indicates that individuals of higher economic and social sta-

tus should usually have invested more of their economic resources in expensive ceramics than would individuals of lower status. However, some wealthy families, particularly in occupations such as farming, might choose to invest less than would be expected in ceramics due to competing investments in land and other goods. On the other hand, since both nineteenth and twentieth century studies indicate that investment in ceramics forms only a small proportion of total wealth, and the smallest proportion for the wealthy, it can reasonably be expected that most wealthy families could afford to make this small investment. In only a few cases is it expected that individual preferences or overextended investments in other goods would result in ceramic choices that do not represent occupational status.

In order to assess relationships between relative mean price index values of archaeological ceramic assemblages and occupational status, the possible effects of differential discard must be considered. Although individual variation in discard behavior always affects the archaeological record in unpredictable ways, some patterns can be expected for different status levels. Discard of expensive ceramics is in general expected to increase with status due to larger numbers of these ceramics and their greater frequency of use. At the same time, in comparison to inexpensive ceramics, households are expected to discard fewer expensive ceramics, such as porcelain, due to the greater care expected in the less frequent use of expensive versus inexpensive ceramics. As wealth increases it is expected that more ceramics of all kinds would be bought and discarded, resulting in more porcelain than moderate status households, and more less expensive ceramics as well. However, the proportion of discarded expensive ceramics in the total assemblage is expected to increase with wealth.

This research is concerned with relating the mean relative value (based on price at purchase) of archaeological ceramic assemblages to variables affecting ceramic consumer choices. It is hypothesized that the

variation in the mean value of site ceramic assemblages can be accounted for by variations in occupational status, influenced in some cases by ethnicity and market access. The primary analysis involved comparing socio-economic status and relative mean price index values for the ceramic assemblage from the Green site in Windsor, Vermont, excavated in 1983 by students at the University of Massachusetts/Boston, under the direction and supervision of the authors. In the next section the Green family's socio-economic status is first assessed through documentary analyses. Then the archaeological data and methods of analysis are described. In order to assess the relationship between occupational indications of status and Miller's ceramic price scaling indices, eleven sites, including the Green site, are rank ordered by ceramic index. The ceramic index site rank order is compared and contrasted to the accompanying rank order of site by residents' occupations in order to assess the degree of correspondence between the archaeological and documentary data. Secondly, ceramic index site rank orders are compared with ethnicity and market access of site residents to determine the extent to which these variables also affect the mean values of archaeological ceramic assemblages.

The major methodological research problem is concerned with expected differential discard patterns for decorative ceramic types. For the Green site it was possible to quantify biases in the archaeological and documentary record by comparing and contrasting percentages of decorative ceramic types recovered archaeologically with percentages recorded in Isaac Green's unusually detailed probate inventory. For archaeological data, less discard of expensive than inexpensive ceramics was hypothesized. At the same time it was expected that the probate inventory would record expensive ceramics in more detail than inexpensive ceramics.

The Green Family's Socio-economic Status

The Green Mansion site possessed the ideal combination of extensive documenta-

tion and a large ceramic assemblage needed in order to relate Miller's ceramic price scaling indices to socio-economic status. The locally elite socio-economic status of the Green family is well documented in local histories, town meeting minutes, probate and land records, newspapers, tax lists, personal letters, and manuscript census schedules, which also were used to construct a mid-century economic profile of Windsor, Vermont, as the context for assessing the family's position in the community. The Green family maintained a fairly constant socio-economic level, providing a control over this variable in relation to their ceramic consumer choices.

The Green house site was located in Windsor, Vermont, a key market crossroads town with ready access to the national market. Further, Isaac Green was a dry goods merchant with high access to ceramics at lower cost than he sold them to his neighbors. Therefore the family's ability to acquire goods probably was limited only by their needs, their income, and their personal preferences, rather than by the availability of consumer items.

Isaac Green was a physician and dry-goods merchant who moved to Windsor from Leicester, Massachusetts, in 1788. He built the original section of the mansion in 1791, although additions were constructed in the following two decades and in the late 1840's. Within a short time Green had firmly established himself among the local economic and social elite. Although he devoted much of his attention to his thriving dry-goods business, he was very active in a variety of business ventures; he served as director of both the Bank of Windsor and the Cornish Bridge Company. He gradually accumulated a considerable amount of land in and around the town, much of which he acquired for speculative purposes or leased to tenants. Green served as a selectman seven times and held numerous other public offices as well. He was nominated for several state offices, and he was instrumental in the lobbying effort to bring the new Vermont State Prison to Windsor in 1807. He was related by mar-

riage to Samuel Barrett, a leading Boston merchant, and to the artist John Singleton Copley. Among the furnishings in the Green Mansion were a Chippendale secretary currently in Boston's Museum of Fine Arts, and two Copley portraits.

Isaac Green died in 1842, and at the death of his wife in 1847, the property passed to their son George. George B. Green began his career as a dry-goods merchant but retired in 1835 to devote his energy to farming and the raising of fruit. In the late 1840's, at the same time that he came into possession of the family home, he began to manufacture and market a popular brand of patent medicine, Oxygenated Bitters, which was sold at least as far away as Boston. He was not as active in public life as his father had been, but he too accumulated a large amount of real estate in Windsor. He also was a pillar of the local Congregational Church.

Several years after George Green's death in 1866, the property passed to his daughter Ann, who owned it until her death in 1922. Except for a period of six years when she was married, Ann Green lived alone in the house. For the next forty years the property was used only as a summer residence by her two nieces until it finally passed from the family in the late 1950's (Heberling 1985).

There is no doubt that the Greens were members of Windsor's economic elite. According to the federal census records, the average Windsor resident owned only \$2,810 worth of property in 1860 and \$2,718 worth in 1870, and in each year only 5 percent of the work force owned property worth at least \$10,000. An additional 6 percent owned property valued at between \$5,000 and \$10,000 in 1860, while 11 percent fell within that range in 1870. Windsor's economic hierarchy was highly stratified, with the wealthiest ten men owning about 35 percent of the town's total property but comprising only 2.5 percent of all adult males. At the bottom of the scale were those individuals owning less than \$1,000 worth of property—53 percent of all adult males in 1860 and 57 percent in 1870. In both 1850 and 1860 George Green was the

second largest landowner in town with real estate valued at \$18,000 and \$23,500, and in the latter year he ranked third in the combined value of his real and personal property (U.S. Census Manuscript Schedules, 1850-1870: Vermont, Windsor County).

At George Green's death in 1866, he owned at least \$9,143 worth of property, although his cash apparently was not inventoried (Windsor Probate Records, 29:504). Isaac Green's estate was inventoried at \$6,174.77 in 1844, and Ann Green owned property worth \$21,957.90 at her death in 1922 (Windsor Probate Records, 17:141; 74:563). All three family members can be placed near the top of the local economic hierarchy. The census and probate records indicate that they chose to invest the bulk of their economic resources in land rather than in tangible forms of personal property. Household goods accounted for 29 percent (\$1,476), 18 percent (\$1,395), and 12 percent (\$1,298) of the combined value of real estate and personal property in the inventoried estates of Isaac, George, and Ann Green, respectively. These dollar amounts are close to the \$1,500 value after which the value of moveable goods leveled off in St. Mary's County, Maryland, in the 1840's (Herman, Sands, and Schector 1973:59-60). Ceramics comprised 4.5 percent (\$66.10) and 3.6 percent (\$49.83) of the value of the household goods owned by Isaac and George Green (Windsor Probate Records, 17:141; 29:504; 74:563). These percentages seem high for one of the wealthiest families in town, possibly because as merchants, Isaac and George Green had unusually high access to ceramics. These data supported the expectation that the archaeological ceramic assemblage index would correspond to the Green family's relatively high status.

Data and Methods

The data included documented occupations and ceramic indices for eleven comparative sites. Besides the Green Mansion, these sites included a privy deposit, c.1842-50, of Manuel Diaz, a prominent merchant

in Monterey, California (MCD 1846.5)(Felton and Schulz 1983:3-13, 69-71); sites of the planter's kitchen, an overseer's house and a slave cabin at Cannon's Point Plantation, St. Simon's Island, Georgia, 1793-1860 (MCD's 1815-1824)(Otto 1980:5-7); Black Lucy's Garden, an indigent freed slave, 1815-45 (Baker 1980:31-2; Felton and Schulz 1983:77); the Skunk Hollow, New Jersey, Cluster B deposit dating c.1798-1829 from the house of a freed black laborer and later a minister (Geismar 1982:186, 71, 47-51, 23, 24, 17); the Franklin Glass Factory and Glassworker's house sites, Portage County, Ohio, 1824-32; the Jonathan Hale Cabin, Summit County, Ohio, built by squatters in 1810, and occupied by the Hale farm family until 1830; and a c.1800-1840 deposit from the Moses Tabbs tenant farm house in St. Mary's County, Maryland, (Miller 1980:35-6; Miller and Hurry 1983: 89-90). Although the amount of socio-economic information varied, residents' occupations were available for all of the sites. Thus the ceramic index site rank orders were first compared and contrasted with corresponding occupational status site rankings. Because data were also available on variations in site location, indicating market access, and ethnicity, the relationships of these two variables to ceramic indices and socio-economic status were also considered. The analysis year was 1824 for all of the sites except Black Lucy's Garden and the Green Mansion, both 1833, and the Diaz merchant, 1846. In this research, occupation and ceramic indices were determined for the Green Mansion, and ceramic indices were calculated for the Cannon's Point Plantation sites from Otto's dissertation (1975:205-17). The other data were drawn from the publications cited.

The primary research at the Green house site is concerned with the analysis of an archaeological sample of ceramics deposited in sheet refuse adjacent to the foundation of a large house in the small town of Windsor, Vermont. It is assumed that the ceramics were discarded or lost by the household living in the house and controlling its yard.

This assumption seems warranted since there was only one neighboring structure, a dwelling that served as a school during part of the first half of the 19th century. The house was located on a hill with a long set of stairs to the front door but a steep bank behind, a cemetery on the south side and the dwelling or school to the north. Thus the limited difficult access to the site argues against deposition on the site by non-household members, who would have to make a special effort to do so. The archaeologically recovered ceramics, as in other cases, represent a partial sample of the ceramics used and discarded or lost by the household. The archaeological sample suffers from the normal biases of selective discard and archaeological recovery techniques that can never recover all deposited data. Given these normative archaeological conditions, the ceramics represent a partial and biased sample of the Green household's ceramics that were probably predominantly acquired through the economic system, particularly since the head of household was a merchant.

The ceramics analyzed from the Green Mansion site were recovered from twenty excavation units, each three feet square, located near the surviving structures on the site. It was assumed that the Green household was most likely to discard ceramics next to the house, especially since there was only one neighboring dwelling/school. The surviving house structure, historic maps and ethnographic information on recent and planned land alterations all afforded information affecting the stratification of the site into areas with different archaeological potential. Those strata with highest potential and most threatened by future land alterations were sampled first, supplemented by additional units when heavy sheet refuse deposits were located. The sampling strategy was designed to provide a maximum ceramic sample most probably discarded by the household within the constraints of time and manpower.

The vast majority of the ceramics were found in ten excavation units placed along

the foundation of a structure dating to the 1840's, an area which was the location of a large deposit of building debris and household refuse. Other units were placed around a small addition dating to about 1810. The Mean Ceramic Date of the assemblage was 1821.1, corresponding well with the median date of 1828.5 for the most intensive occupation of the Green site between 1791 and 1866. After 1866 the Green house never was occupied by more than one or two individuals at any time. Further, these individuals apparently were extremely fastidious about the appearance of the property and were unlikely to have disposed of refuse in close proximity to their home (Carroll 1983). In contrast, Isaac Green was the head of a family of six and George Green of a family of seven. Boarders and servants lived in the households of both men between 1791 and 1866. Therefore, it was expected that the ceramic assemblage recovered during excavation would date primarily to the first two thirds of the nineteenth century. The vast majority of ceramic sherds are creamware and pearlware, and most were of types, designs and colors manufactured in the early nineteenth century.

The possibility that all the ceramics could have been discarded or lost by Isaac Green's family is supported by Isaac's probate inventory, that lists most of the types of ceramics discarded, including stone china. In addition, since George Green probably inherited his father's ceramics, it is likely that many of his discarded ceramics actually represented earlier purchases by Isaac Green. This possibility is supported by some listings of the same ceramic types in Isaac and George Green's inventories, with smaller quantities in George's than Isaac's inventory. Since Miller's index values are relative prices of ceramics, they pertain to acquisition date rather than discard date. The archaeological and documentary evidence indicates that most of the ceramics in the archaeological assemblage are of types acquired and owned by Isaac Green, as indicated in his probate inventory. It is also possible that George Green could have ac-

quired and discarded some of the same kinds of ceramics owned by his father, particularly some of the ironstone excavated. Since the ceramics were not segregated into strata that could be temporally distinguished by artifact type frequencies as belonging to George rather than Isaac Green's family, it was necessary to treat the entire assemblage as a single unit. Although Isaac and George Green's time span of seventy-five years could be considered rather long for the accurate application of the Miller Index, all of the ceramics could have been acquired in the early nineteenth century, so the ceramic assemblage could not be subdivided into smaller groups corresponding with the occupation period of each owner.

Methodology

The relationship between the mean value of archaeological ceramic assemblages and socio-economic status was assessed by comparing and contrasting the rank order for eleven site ceramic indices (Miller 1980) with their accompanying occupational status rankings. Ratio values were calculated for three types of forms: plates (flatware), bowls, and cups and saucers (teaware). A combined vessel form index was also calculated by adding the total products for the three indices and dividing by the combined vessel number. Because Miller's ceramic indices are weighted mean ratios, determination of the significance of a site's index requires its comparison with indices at other sites to establish the scale for each index. Site occupations need to be documented in order to assess the possible correspondence between the ceramic index value scales and socio-economic status. Miller's ceramic index is a potentially valuable tool for inferring social stratification by comparing the relative values of ceramic assemblages from different sites.

Although the documented median date of intensive occupation for the Green Site is 1829, Miller does not provide ceramic scale values for that year. The closest years for which scale values are provided are 1824

and 1833. It was decided to use the 1833 values since these would be more effective in taking into account the site's continued light occupation after 1866. For decorative types without assigned relative values for 1833, the value for the year closest to 1833 is used. For example, it is necessary to use 1858 scale values for ironstone plates and bowls since 1858 is the earliest year for which such values are provided. This method seems preferable to the ceramic index distortion produced by simply excluding wares for which index values are not provided in the appropriate year.

Several other adjustments have been made to Miller's technique. Although in a few cases vessels could be reconstructed, many vessels were distinguished and counted on the basis of distinctive rims. Since most of the vessels are far too fragmentary to indicate their original dimensions, the scale values for the various sizes of flatware have been averaged for each decorative type to produce a single flatware value. Similarly, it is usually impossible to determine whether or not a cup originally possessed a handle, so the three values for cups-handled, not handled, and not given—of each decorative type have been averaged to produce a single cup value. Despite these limitations, the Green site yielded a large sample of ceramics, increasing the reliability of the ceramic indices calculated. Ceramic indices were calculated for plates (flatware), bowls, and cups and saucers (teaware). A total ceramic vessel index was calculated from these three indices using the average index values for flatware, teaware and bowls. Additional shapes were included in another average index because pitchers and other unidentifiable forms could indicate status as well as the three forms with separate indices.

The relative value of the Greens' ceramics was assessed from the rank order of the site's ceramic indices compared to ten other sites. Sites were rank ordered first by the ceramic index value representing the mean value of teaware, flatware and bowls combined. Ceramic index site rank orders were

compared with the resulting occupational site rank order to determine whether variations in the ceramic index values can be accounted for by site differences in socio-economic status. In a second analysis, sites were rank ordered according to their teaware ceramic index values because these were found to correspond best to the occupational status site rank order. The effects of differential market access and black ethnicity were secondarily considered in relationship both to socio-economic status and inter-site variations in ceramic index values.

The methods of ceramic index calculation varied among sites, but are basically comparable. For the Green site pearlware was categorized as white glazed (Miller 1980), while for most other sites it was grouped with creamware, sometimes due to lack of differentiation in data recording (Otto 1975:205-17; Felton and Schulz 1983:74-80). In a test on five Boston area sites, calculation of ceramic indices with pearlware classified either as white-glazed or creamware caused very little variation (at the .01 level) in the weighted mean value. Thus these different recording methods probably do not result in any significantly different index values. Felton and Schulz calculated ceramic indices for the Cannon's Point Plantation, Diaz and Black Lucy sites, excluding ironstone, porcelain and other types when values were not available in the index year. Recalculation of the three Cannon's Point site indices including these ceramic types with the value available nearest to the index year resulted in some changes in ceramic index values but little change in site rank orders. At most the different calculations resulted in a shift of two positions in a given ceramic index rank order. Because ceramic indices are weighted means, differences in quantities of decorative types must be quite large to result in any substantial variation in the mean. Thus, despite minor differences in data base, such as the inability to separate all platters from plates for the Cannon's Point sites (Otto 1975:205-17), or the differentiation of handled and unhandled cups from the Diaz Privy (Felton and Schulz

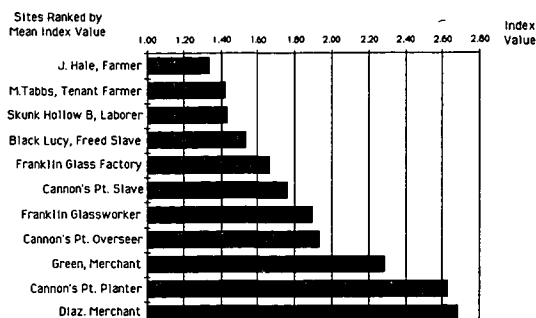


Figure 1. Vessel Ceramic Indices for 11 Sites

1983:76), the ceramic index values for all eleven sites are considered comparable.

The last analysis was a comparison of the percentages of decorative ceramic types in Isaac Green's unusually detailed inventory. This analysis indicated some of the biases in the archaeological and documentary records. This comparison was undertaken because the decorative types recovered were the same ones listed in Isaac Green's inventory, indicating that they could have been acquired by his family. Although some of the ceramics could have been acquired by George Green, the lack of detail in most of his inventoried ceramic listing makes this impossible to determine. A few of the itemized ceramics in George Green's inventory suggest the inheritance and discard of ceramics acquired by Isaac's family. A listing of 2 1/2 dozen custard cups in Isaac Green's inventory is paralleled by the unusually detailed listing for George Green's inventory of 1 1/3 dozen custard cups, suggesting some additional discard by George's family. Other similar listings found in both inventories include one chamber set, a fruit dish, three ewer and basin listings and a number of stone jars and churns. It is also possible that these similar listings represent different items bought by each family. George Green's inventory does list two pairs of vases and CC chambers that are not listed in Isaac Green's inventory. The lack of detail in George Green's inventory does not permit an assessment of the decorative ceramic types his family acquired. Since the Mean Ceramic Date of 1821.1 and artifact examination indicates that all of the ceramics could have

been acquired by Isaac Green's family, decorative type percentages in Isaac's probate inventory were contrasted with archaeological percentages in order to assess discard and recording biases.

Results

Figure 1 represents the rank order of eleven early nineteenth century sites based on the average index value for combined teaware (cups and saucers), flatware (plates) and bowl ceramic vessels. Although in some cases documentation on the sites' inhabitants is not very complete, their relative status can be basically inferred from their occupations. Among site average ceramic indices the Green Mansion Site ranks near the top of the scale, surpassed only by the Cannon's Point planter, and the Diaz merchant. The Cannon's Point planter and Manuel Diaz were individuals of documented high socio-economic status, as were Isaac and George Green. The sites with scale values falling below that of the Green Site were occupied mainly by slaves, free blacks, and whites of relatively low occupational status. The position of the Green Site on the scale is where it was expected to be, based on the documentary evidence. The average ceramic index scale corresponds very well with the occupational status rankings, indicating a strong relationship between the relative mean value of site assemblage decorative types and socio-economic status.

The mean index value of a ceramic assemblage is more influenced by the teaware index value than by the flatware or bowl index values. This is due to the significantly higher values for all decorative types of cups and saucers compared with plates or bowls. Since the amount of ceramics, including teaware, increases with wealth, the more teaware owned by a household, the higher its value, and therefore, the more its value influences the mean assemblage ceramic value. Another possible factor in higher ceramic indices with more teaware is sample size. Larger archaeological samples, being more representative than small samples,

Figure 2. Ceramic Indices for Cups, Plates and Bowls at 10 Site Components

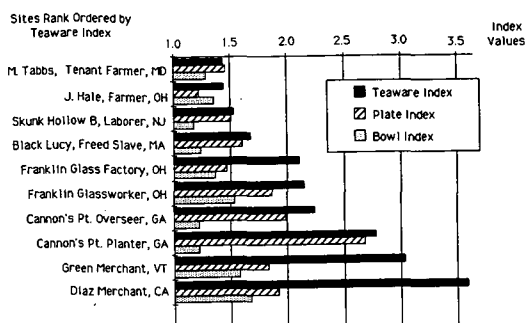


Figure 2. Ceramic Indices for cups, Plates and bowls at 10 Site Components

yield more expensive highly decorative types in proportion to low valued ceramics. Four of the five highest ranking sites have sample sizes of between 94 and 211 vessels, while the sample sizes of the lower ranked sites generally decline with their ranking. However, low ceramic index values are produced for low status sites with moderate as well as small samples, since little status ware is present at these sites. In addition the highest ranked Diaz merchant had a sample size of 74, indicating the representativeness of this sample size.

Figure 2 is based on a ranking of ten sites by the ceramic index values of their teaware, shown in black. The Cannon's Point slave site has been eliminated from this figure because of its similarity to the overseer ceramic indices, and its non-status related methods of ceramic acquisition. It will be noted that among the ten sites, the relative values for bowls have a narrow range of variation ranging from 1.18 for Skunk Hollow cluster B to 1.68 for the Diaz merchant. Since the values are so similar, mainly falling between 1.18 and 1.37, the relative value of bowls in an assemblage does not seem to be an accurate status indicator. The values for flatware forms exhibit a greater range of variation from 1.23 for the Hale Cabin to 2.69 for the Cannon's Point planter. Both extremes appear to be unusual, since the remaining assemblages all have flatware values falling between 1.46 and 1.99. By far the greatest range is in teaware values, which vary from 1.44 for the Tabbs House to 3.59 for the Diaz Privy. The

ranking of sites is similar to that in Figure 1, but there is a much wider gap between the two extremes and the scale conforms even more to what the documentary record indicates about the status of the inhabitants. The latter point is illustrated by Table I, which ranks all eleven sites by the scale values for each vessel form. While the ranking of sites by teaware values corresponds very well in most cases with documented occupational status differences, ranking by flatware and bowl values is much less satisfactory. These results indicate that flatware and bowls have a primarily utilitarian function, while the primary status display function of teaware results in its high degree of correspondence with occupational status.

In contrast to other sites, the Cannon's Point Plantation site ceramic indices did not all correspond well with their occupational status differences. The particular relationships among these sites offers an explanation for their unusual indices. The exceptionally high teaware index for the Cannon's Point slave is due to ceramics handed down from the planter and overseer, as indicated by shared patterns and types of ceramics, including porcelain. The unusually high teaware and flatware values for both the overseer and the slave are due in part to shared transfer printed patterns from the planter's site (Otto 1975:162-73). Similarly, all three sites have unusually low bowl values. The apparent contradiction between the planter's top rank order among flatware indices, and his third rank order among teaware indices may be due to the effects of the variables of site location. Felton and Schulz pointed out that because the planter lived in a rural environment, he may have been more likely to invite guests for complete meals rather than for tea alone, and this may have caused him to invest in expensive flatware instead of teaware. Individuals living in more urban environments, such as Manuel Diaz and the Green family, may have tended to invest in teaware because of their different social needs. Felton and Schulz suggest that "the Diaz vessel pattern (high average values of tea and coffee wares

TABLE I
RANK ORDER OF SITES BY CERAMIC INDEX FOR EACH VESSEL FORM AND THEIR AVERAGE

A. Average Ceramic Index Rank Order

Site, Occupation, State	Index Year	Ceramic Index Average Value	Total # Vessels
Diaz, Merchant, CA ^a	1846	2.69	74
Cannon's Pt, Planter, GA	1824	2.63	211
Green, Merchant, VT	1833	2.29	94
Cannon's Pt, Overseer, GA	1824	1.94	105
Franklin Glassworker, OH ^b	1824	1.90	94
Cannon's Pt, Slave, GA	1824	1.76	92
Franklin Glass Factory, OH ^b	1824	1.67	62
Black Lucy, Freed Slave, MA ^a	1833	1.53	58
Skunk Hollow B, Black Laborer, NJ ^c	1824	1.43	64
M. Tabbs, 2, Tenant Farmer, MD ^b	1824	1.42	16
J. Hale, Farmer, OH ^b	1824	1.34	45

B. Teaware Ceramic Index Rank Order

Site, Occupation, State	Teaware Ceramic Index Values	# Vessels
Diaz, Merchant, CA ^a	3.59	35
Green, Merchant, VT	3.04	40
Cannon's Pt, Planter, GA	2.78	77
Cannon's Pt, Slave, GA	2.36	22
Cannon's Pt, Overseer, GA	2.24	35
Franklin Glassworker, OH ^b	2.15	33
Franklin Glass Factory, OH ^b	2.11	21
Black Lucy, Freed Slave, MA ^a	1.68	17
Skunk Hollow B, Black Laborer, NJ ^c	1.53	11
J. Hale, Farmer, OH ^b	1.45	17
M. Tabbs, Tenant Farmer, MD ^b	1.44	3

C. Flatware Ceramic Index Rank Order

Site, Occupation, State	Flatware Ceramic Index Value	# Vessels
Cannon's Pt. Planter, GA	2.69	121
Cannon's Pt. Overseer, GA	1.99	51
Diaz, Merchant, CA ^a	1.92	34
Cannon's Pt, Slave, GA	1.90	36
Franklin Glassworker, OH ^b	1.86	44
Green, Merchant, VT	1.83	35
Black Lucy, Freed Slave, MA ^a	1.61	25
Skunk Hollow B, Black Laborer, NJ ^c	1.51	36
Franklin Glass Factory, OH ^b	1.47	33
M. Tabbs, Tenant Farmer, MD ^b	1.46	8
J. Hale, Farmer, OH ^b	1.23	20

D. Bowl Ceramic Index Rank Order

Site, Occupation, State	Bowl Ceramic Index Value	# Vessels
Diaz, Merchant, GA ^a	1.68	5
Green, Merchant, VT	1.59	19
Franklin Glassworker, OH ^b	1.54	17
Franklin Glass Factory, OH ^b	1.37	8
J. Hale, Farmer, OH ^b	1.36	8
M. Tabbs, Tenant Farmer, MD ^b	1.29	5
Black Lucy, Freed Slave, MA ^a	1.24	16
Cannon's Pt. Overseer, GA	1.23	19
Cannon's Pt, Planter, GA	1.23	13
Cannon's Pt, Slave, GA	1.23	34
Skunk Hollow B, Black Laborer, NJ ^c	1.18	17

^aFelton and Schulz 1983; 3-13, 74-77^bMiller 1980; 35-37^cGeismar 1982; 186, 17, 23-24, 44-51, 71

relative to other vessel forms) represent "status spending" and is indicative of high economic position (Felton and Schulz 1983:83), although it should be added that this may be true only for urban and semi-urban sites. In addition, the higher teaware index value for the Diaz site compared to the Cannon's Point planter is due to the greater amounts of transfer printed teaware at the Diaz site, and its effect on the ceramic index. The Green family's ceramics exhibit many of the characteristics of the "Diaz vessel pattern". The similarities between the two assemblages may well be a result of the inhabitants' similar positions as successful merchants belonging to the local social and economic elite living in semi-urban settings.

Although the variation in archaeological ceramic index values, particularly of teaware, corresponds mostly to variations in socio-economic status, in some cases the variables of ethnicity and market access are related both to occupational status and to consumer choices. The low status of the black ethnic sites is evident in occupational status as well as ceramic index values. For these cases ethnicity strongly influences socio-economic status and its relationship to mean values of archaeological ceramic assemblages. In the case of the Cannon's Point Plantation slave site unusually high teaware and flatware indices are due to ceramics handed down from the planter, and do not represent ceramics chosen from the market on the basis of the slaves' economic ability to afford them, or desire to display status.

Socio-economic status rather than market access accounts for most of the variation among site ceramic index values. Most of the sites had relatively high market access, due to nearby water transportation to either the East or West Coast cities where English ceramics were imported into the United States. In the cases of the Green and Diaz sites, higher market access accompanies the occupation of merchant, permitting them to obtain high status ceramics at a lower cost than people with other occupations. High values both for market access and

socio-economic status reinforce each other, producing two of the highest ceramic index values. In contrast, in the case of the Jonathan Hale site, documentary research has established that the residents' social status and wealth in land was not reflected in ceramics because of the difficulty of market access from Ohio to the East coast and England before the Erie canal was constructed across the Allegheny mountain barrier in 1825 (Miller and Hurry 1983). In addition, because Hale site residents were farmers, they probably had less need for status display through ceramics than did the merchant and planter occupations that were highly ranked.

The possibility was considered that the application of scale values for years other than 1833 might alter the position of the Green assemblage in the ranking. To explore this possibility, assemblage scale values for five different years have been calculated. Again, if values for certain decorative types were not provided by Miller for a given year, the figures for the nearest year were used. As can be observed in Table II, the use of different scale years has a noticeable effect on the resulting scale values, but it does not alter the relative position of the Green assemblage in the site ranking. The steady decline in value as successively later index years are used is quite interesting and seems to be attributable almost completely to the declining value of the flatware group. As Table II demonstrates, the relative values of other forms remain very stable regardless of the index year used. The decline of the flatware group is due to the declining relative values of its three most common types: edged, transfer-printed, and ironstone.

Biases in the archaeological and documentary records are indicated by comparing and contrasting percentages of archaeological versus inventoried ceramics (Table IV). A comparison of Isaac Green's inventory with the ceramic assemblage indicates that he was careful with his porcelain, discarding little of the numerous sets recorded in his inventory. However, there is a jump be-

TABLE II
GREEN MANSION CERAMIC INDEX VALUES, 1814-1870

	# Vessels	1814	1824	1833	1846	1870
Bowls	19	1.59	1.58	1.59	1.59	1.53
Flatware	35	1.99	1.85	1.83	1.68	1.41
Teaware	40	3.04	3.04	3.04	3.01	2.89
Other	11	1.85	1.83	1.83	1.78	1.76
Average Value for Bowls, Flatware & Teaware	94	2.35	2.30	2.29	2.22	2.06
Average Value for All Vessels	105	2.30	2.25	2.25	2.18	2.05

tween the ceramic values of low to moderate status and high status occupations, supporting the hypothesis that wealthier households would discard relatively more porcelain than lower status households. It is interesting that in the case of the Greens this higher level of discard still represented much less frequent discard for porcelain than for less expensive ceramics. The archaeological ceramic index values are lower than was expected from Isaac Green's probate inventory, principally because sherds from only a few porcelain vessels were excavated compared to the relatively large quantity and high value of china listed in the inventory. Of the excavated ceramics porcelain comprised only six percent of the vessel count and .6 percent of the sherd count, in contrast to 24 percent porcelain among the inventoried ceramics. Even taking into consideration that some inventoried ceramics were not counted or identified, this large discrepancy between excavated and inventoried proportions of porcelain indicates that the Greens were taking better care of porcelain than other ceramics, and discarding a lower proportion of porcelain than they owned. The 24 percent ironstone vessels in the archaeological assemblage indicates a much higher discard of the 13 percent stone china vessels listed in Isaac Green's probate inventory (Table IV). Ironstone was probably used every day, resulting in more breakage and discard than of porcelain. Another possible explanation for this disparity, as well as the contrast between the 21 percent transfer printed vessels found archaeologi-

cally and the 8 percent inventoried, is that not all the vessels owned were properly identified and counted. Because stone china was relatively expensive, indicating status, it is more likely to be specified in the inventory than the less expensive transfer printed, edged and undecorated wares. Several listings of "blue", "green", and "brown" dishes could have been transfer printed, but were not so specified. In contrast, the archaeological percentage of creamware is a little lower than the inventoried percentage, indicating less discard of this inexpensive ware than the expensive stone china. The reason for the apparently low discard of creamware is probably due to the difficulty of archaeologically distinguishing vessels from very similar creamware rims and sherds.

A second comparison was made between percentages of decorative types in the value of the total vessel ceramic index, versus the total value of inventoried ceramics. Compared to the numerical relative frequencies, there is less difference between the percentage contributions of porcelain, ironstone and creamware to the value of the total vessel ceramic index and the total value of inventoried ceramics. Although the archaeological porcelain is still a smaller proportion of the ceramic index than of the inventoried ceramics, the difference is smaller. The proportional contribution of ironstone to the ceramic index is less than the percentage of total inventoried ceramic value, while the percentage of creamware is nearly the same. The greater contribution of transfer printed

TABLE III
GREEN MANSION 1833 CERAMIC INDEX CALCULATIONS

Form	Type	Index Years Used	Vessel Count				
			#	×	Value	=	Product
Teaware	CC	1814, 1802	2	×	1.22	=	2.44
	White-Glazed	1814	2	×	1.67	=	3.34
	Sponged	1871	3	×	1.17	=	3.51
	Painted	1814, 1824	6	×	1.70	=	10.20
	Printed	1814, 1824	9	×	3.22	=	28.98
	Ironstone	1856, 1858, 1881	12	×	3.98	=	47.76
	Porcelain	1824, 1857, 1875	6	×	4.20	=	25.20
	Subtotal for Teaware		40				121.43
Mean Value of Teaware				3.04			
Flatware	CC	1833	5	×	1.00	=	5.00
	Edged	1833, 1824	9	×	1.34	=	12.06
	Printed	1833, 1824	8	×	2.86	=	22.88
	Willow	1833, 1836	1	×	2.20	=	2.20
	Ironstone	1858, 1861	12	×	1.82	=	21.84
	Subtotal for Flatware		35				63.98
Mean Value of Flatware				1.83			
Bowls	CC	1833	7	×	1.00	=	7.00
	Dipped	1833	1	×	1.29	=	1.29
	White-Glazed	1814	2	×	1.60	=	3.20
	Sponged	1855	—				—
	Painted	1833	1	×	1.71	=	1.71
	Printed	1833	1	×	2.57	=	2.57
	Ironstone	1858	6	×	2.00	=	12.00
	Flow	1855	1	×	2.40	=	2.40
Subtotal for Bowls		19				30.17	
Mean Value of Bowls				1.59			
Other	CC		2	×	1.07	=	2.14
	Printed		1	×	2.88	=	2.88
	Painted		1	×	1.88	=	1.88
	Edged		2	×	1.34	=	2.68
	Flow		3	×	2.40	=	7.20
	Underglaze-Lined		2	×	1.69	=	3.38
	Subtotal for Other		11				20.16
Mean Value of Other				1.83			
Total for Assemblage			105				235.74
Mean Value of Assemblage					2.25		
Total Teaware, Flatware and Bowls			94				215.58
Mean Ceramic Index Value					2.29		

to the ceramic index value than to the inventoried ceramic value may be due to under recording of this type in the inventory.

This comparison indicates that the Green site ceramic indices are lower than is indicated by the inventoried ceramics (Table IV).

TABLE IV
PERCENTAGES OF NUMBERS AND VALUES OF ARCHAEOLOGICAL AND INVENTORIED CERAMIC
TYPES FROM THE GREEN MANSION

Ceramic Type	Isaac Green's Inventory				Archaeological Assemblage			
	Percent	Vessel #	Percent	Value	Percent	Vessel #	Percent	CI Value
Porcelain	24	162	24	\$17.82	6	7	10	29.40
Ironstone	13	90	43	\$31.15	24	31	30	85.58
Creamware	20	141	9	\$ 6.75	14	18	7	18.72
Printed	8	57	4	\$ 3.03	21	27	28	79.98
Other Whiteware	35	<u>239</u>	20	<u>\$14.45</u>				
Total		689		\$73.20		127		248.76

CONCLUSIONS

This analysis has demonstrated that relative economic status can be indicated in most cases by applying Miller's price scaling ceramic index to teaware vessels alone. This indicates a primary status display function for teaware in contrast to the combination of possibly status related tableware and more utilitarian kitchenware plates and bowls functioning in food processing and preparation. The ranking of sites by teaware values seems to be much more accurate than ranking them by flatware or bowl values, and even more accurate than ranking them by total assemblage values, although the teaware values are so influential that they largely determine the relative value of the combined assemblage ceramic index. Even in the case of the Cannon's Point planter, with higher ceramic index values for flatware than teaware, teaware values identify him as a person of comparatively high economic status in relation to the other site inhabitants. The results of this research indicate a strong relationship between occupation and archaeological assemblages of ceramic decorative types, particularly in teaware. This relationship may often permit the inference of the relative socio-economic status of site residents from the relative value of ceramic assemblages, especially teaware, when documentary data are not available.

It has been demonstrated that the relative socio-economic position of the Green family could have been determined in the absence of extensive documentation by applying Miller's ceramic price scaling index to their archaeologically recovered ceramics. Although the Greens chose to invest the bulk of their economic resources in land, they still spent a relatively high proportion of their income on ceramics. A high degree of correspondence was found between the mean price index value of the Green's archaeological whiteware assemblage and documentary data on their relative wealth.

The results of this research are particularly interesting because they indicate that in most cases the variation in archaeological ceramic index values can be accounted for by variations in occupational status that are not contravened by differences in market access and ethnicity, although these variables may act in conjunction. Only at the Jonathan Hale site was market access more important than socio-economic status in limiting ceramic choices indicated by archaeological data. This type of recurring circumstance can be identified, as well as sites representing groups that are not choosing their ceramics from the market, such as the Cannon's Point Plantation slaves. In this case, the archaeological evidence of the same decorative patterns at the planter and slave sites indicated some recycling of ceramics from the planter to the slaves. Fur-

ther research is needed to establish those recurring conditions in which market access and other variables have more effect than socio-economic status on the types of decorative ceramics archaeologically recovered from domestic sites.

The Green site also permitted a case study in the quantification of archaeological and documentary biases. Comparison of percentages of porcelain, ironstone, creamware and transfer printed ceramics in the archaeological assemblage with those in Isaac Green's detailed probate inventory indicated that a very low proportion of porcelain was discarded in contrast to a very high proportion of ironstone. In the probate inventory, underrecording of transfer printed, edged and other inexpensive types was apparent (Table IV). The best explanation for the lower proportion of archaeological versus inventoried creamware seemed to be the difficulty of identifying distinct creamware vessels from unreconstructable rims and sherds. In contrast, the proportional contribution of values for porcelain, ironstone and creamware to the total vessel ceramic index value was closer to the percentages of these wares in the total value of inventoried ceramics (Table IV).

Miller's ceramic price scaling index will be most useful when there is a large number of sites for which scale values have been calculated, for this will greatly enhance its predictive and interpretive capability. In the present case it was possible to gather comparable data on only a small number of sites, all of which were similar chronologically but which were scattered from Massachusetts to Georgia, Ohio, Michigan and California. This geographic scattering may introduce variables unrelated to the socio-economic status of the inhabitants and makes the sites less than ideal for comparison. It would be best to compare sites for which variables such as time period, geographic location, and ethnicity are identical. The development of a ceramic index value scale for a large number of thoroughly-documented site assemblages with greater variable control in all parts of the United States and Canada

will greatly increase understanding of the relationship between archaeological ceramic assemblages, socio-economic status and other variables.

Nonetheless, the primary finding resulting from this research was a high degree of correspondence between rank orders for tea-ware and total vessel ceramic price indices and occupational status. Although site locations ranged across the United States, the research results indicate that relative mean values of archaeologically sampled ceramic decorative types are usually more strongly related to socio-economic status than to market access, in some cases because of similar access due to analogous site locations. Market access was seldom more of a limiting factor in the value of ceramics than was socio-economic status. The highest ceramic indices were generated for site residents with both high socio-economic status and high market access. The effect of ethnicity is apparent in occupational status and therefore largely incorporated in this variable. The conjunctive effect of two variables often reinforced similar ceramic choices. A gap in the scale of ceramic index values between moderate and high status households was found to correspond to expected differential discard patterns. This gap also suggests the possibility of aggregating sites into status groups indicated by relative value of archaeologically recovered whiteware decorative types as Miller's ceramic indices are applied to more sites.

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